

VII.5 Shared Technology Transfer Project (New Project)*

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**Congressionally directed project*

Objectives

In FY 2004, the Shared Technology Transfer Project (STTP) target audience will embrace southern domestic industries and university educators. The key objectives include:

- Catalog NAVSEA-Carderock unclassified technologies with a focus on identifying those technologies that relate to the DOE's Hydrogen Program
- Rate the level of readiness for each hydrogen program-related technology
- Develop and implement an Educational Outreach program to increase awareness within hydrogen-related industries
- Identify & match hydrogen-related businesses that might benefit from the technologies
- Launch an Educational Technology Showcase and website, featuring the initial set of technologies identified as being hydrogen related.

Technical Merit

The energy companies of today will be the energy companies of tomorrow. These companies may be able to *identify complementary and auxiliary technologies that may impact the hydrogen economy* by reducing the capital investment or operating costs associated with the production, delivery and consumption of hydrogen.

The United States faces a significant challenge over the upcoming years in the area of national energy security and sustainable energy development. Sustainable development of our energy resources is essential to the health and prosperity of the nation and must be addressed through close coordination and collaboration involving the best minds from the energy industries, government and academia. *One challenge needing attention is the identification of critical technologies for expanding the safe production of new energy sources, such as hydrogen.*

Approach

The overarching goal of the STTP is to establish a collaborative process with domestic industries for the purpose of sharing Navy-developed technology. The purpose is to educate private business sectors to increase the awareness of these businesses to the vast amount of technologies that are available.

- Over 600 Navy patents are available for technology transfer to several industries. Examples of particular interest to the Hydrogen Program include:
 - hydrogen extraction from seawater (production),
 - methane hydrate processing (production),
 - carbon sequestration (production related),
 - extremely high pressure valves and seals (storage),
 - sensors,
 - monitoring systems (storage and/or safety), and
 - advanced power sources such as fuel cells for marine application.
- Others that may be hydrogen related are yet to be identified.

Primary organizations involved in the STTP include Nicholls State University, the Houston Advanced Research Center, South Louisiana Economic Council's Advanced Technology Center and the Naval Sea Systems Command Carderock Division (NAVSEA-Carderock).